

- on segments 1-3; vesicle granular to the base of aculens; carapace and terga finely granular. *granulatus*, sp. n.
- b. Third segment of tail granular below, superior and supero-lateral crests obsolete on segments 1-4; segments 1 and 2 more coarsely and irregularly tubercular below, the first with an anterior transverse crest of tubercles; vesicle punctured; tergites and carapace smooth and polished *brachycentrus*, Thor.

LXI.—*The Scorpions of the Genus Væjovis contained in the Collection of the British Museum.* By R. I. POCKOCK.

Genus VÆJOVIS, C. Koch.

Vajovis variegatus, sp. n.

♀.—*Colour* reddish ochre-yellow or reddish brown; carapace with black tubercle and irregular lateral blackish patches; tergites regularly marked, lateral margin black, with a yellow stripe separating it from a broad black patch; the median keel marked with a very narrow black stripe which sometimes expands in front and behind; between this and the large lateral patch there is a deep black spot, narrowed and projecting inwards in front, where it sometimes fuses with the expanded portion of the keel-stripe; tail clouded below and laterally with black, the position of the lower keel emphasized by black stripes; vesicle and upper surface of tail clear reddish brown.

Palpi reddish brown, scarcely at all infusate; legs strongly striped externally, with pale tarsi and protarsi; lower surface pale, last sternite infusate at the sides.

Upper surface of *trunk* coarsely granular. *Tail* more than four times length of carapace, which equals its first and second segments in length; anterior segments granular above and laterally; fourth and fifth segments smooth above and laterally; superior and supero-lateral keels strongly developed, granular, dentate posteriorly, except the supero-lateral on the fourth segment; segments 1 to 4 entirely smooth and polished below, the median keels entirely obsolete, the lateral merely represented by a low, indistinct, smooth ridge; fifth segment with its lower surface finely and closely granular throughout; *vesicle* entirely smooth and, like the lower side of the tail, punctured.

Chelæ: humerus granular above, in front, and finely below, with well-developed superior and anterior crests; brachium with the upper and lower anterior crests well

developed and granular, with a few large granules above and below, smooth on its upper and posterior surfaces; hand entirely smooth, without crests, punctured, hand-back about three quarters the length of the movable digit, which has 7 teeth on the inner row.

Legs with trochanteres and femora finely granular externally; patellæ weakly granular also.

Sterna quite smooth, punctured.

Pectines with 16-17 teeth.

Measurements of type.—Total length 45 millim.; length of carapace 5.5, tail 25.

♂.—Smaller than female; more coarsely granular; lower side of fourth caudal segment more distinctly granular posteriorly, and the sides of the fourth and fifth caudal segments finely granular.

Hand subcostate above, but not granular.

Pectines larger, with 17-18 teeth.

Measurements in millimetres.—Total length 36; length of carapace 4.5, tail 23.

Loc. Amula in Guerrero, Mexico (*H. H. Smith*).

Væjovis nigropictus, sp. n.

Colour much as in *variegatus*, the tergites marked with four black bands, one on each side close to the middle line and one close up to the margin, leaving a wide yellow space between; tail mostly pale, the keels of the lower surface nigro-lineate; legs and palpi pale.

Lower surface of fifth caudal segment more coarsely and less closely granular than in *variegatus*.

Pectinal teeth 17-18.

Loc. Jalisco, Mexico (*Schumann*).

Væjovis bilineatus, sp. n.

Colour a uniform yellowish red; carapace variegated; terga with a large black patch on each side of the middle line, forming a pair of black stripes.

Closely allied to *V. variegatus* in having the inferior caudal keels absent and infero-lateral scarcely visible and entirely smooth; the hand smooth, punctured, without crests; brachium also scarcely crested.

Pectinal teeth 15.

Measurements in millimetres.—Total length 25; length of carapace 4, tail 15.

Loc. San Diego, Texas (*Wm. Taylor*).

Vaejovis nigrescens, sp. n.

Colour of trunk, limbs, and tail a tolerably uniform brown, tips of fingers reddish.

Carapace rather coarsely granular, but not closely on the interocular frontal area.

Terga coarsely but sparsely granular, the granules forming distinct lateral keels.

Tail thick and longish, more than four times the length of the carapace, second segment broader than long, third as broad as long; superior and supero-lateral keels granular, posteriorly dentate; infero-lateral low, but quite smooth, infero-median obsolete, only just traceable; upper surface of segments 1 and 2 granular, of the rest almost entirely smooth; keels of fifth segment only crenulate, its lateral surface very weakly and obsoletely granular above, the median keel represented merely by a low ridge; *vesicle* punctured, also weakly granular.

Chelæ: humerus weakly granular above and below, coarsely granular in front, furnished with four strong granular crests; brachium also furnished with four strong granular crests, with a row of strong granules on its anterior surface; hand costate, the finger-keels distinct and smooth, the three inner crests strong and strongly granular; fingers long, the movable longer than the carapace and longer than the fifth caudal segment, at least twice the length of the hand-back.

Legs externally granular.

Sterna smooth, the last with a distinct crest and a few granules on each side.

Pectines short, teeth 18-19.

Measurements in millimetres.—Total length 58; length of carapace 7, of tail 34, of hand-back 4, of movable digit 8.8.

Loc. Mexico (54. 76).

Vaejovis subcristatus, sp. n.

♂.—*Colour* reddish yellow; ocular tubercle black; tergites with a V-shaped black patch and a badly defined submarginal black spot; tail nigro-lineate beneath.

Carapace somewhat coarsely granular; terga also furnished with coarse granules; sterna smooth, the last with a smooth crest on each side. *Tail* long, at least five times the length of the carapace, which is shorter than the fifth segment; the inferior and infero-lateral keels of segments 1 to 4 visible as distinct smooth punctured ridges, the laterals at most very slightly crenulate on segments 3 to 4; lateral keel of fifth

segment forming a weakly crenulate ridge; lower surface of fifth sparsely granular, lateral intercarinal spaces of segments 1 to 4 practically smooth; vesicle smooth, punctured.

Chelæ: the posterior crests on brachium developed, but smooth; hand wide, entirely smooth, punctured, and scarcely visibly crested; the width about two thirds the length of the hand-back, which is almost as long as the movable digit, the latter about as long as the fourth caudal segment.

Pectinal teeth 18.

♀.—Resembling the male, but less granular, the antecular area being nearly smooth; tail shorter; hand narrower, its width about half the length of the movable digit.

Pectinal teeth 16–17.

Measurements in millimetres.—♂. Total length 51·5; length of carapace 5·5, tail 31; width of hand 3; length of movable finger 4·5. ♀. Total length 52; length of carapace 6, tail 29; width of hand 2·8; length of movable digit 5.

Loc. St. Andres, Mexico. In the collection of Count Keyserling.

Differs from the species belonging to the *V. mexicanus* section in having the four inferior caudal keels smooth, also the hand in both sexes entirely smooth and keelless.

Vajovis cristimanus, sp. n.

♀.—*Colour* a uniform reddish brown, not variegated; legs yellower.

Closely allied to *V. subcristatus*, but, apart from the colour-differences, recognizable by having the palpi more strongly crested, the posterior surface of the brachium being weakly granular and its inferior crest distinctly crenulate; the hand is also distinctly crested, the crests on its inner surface being granular.

Terga visibly tricostate; upper surface of fifth caudal segment smooth; superior and supero-lateral crest on the fifth segment granular; *vesicle* granular below and more coarsely punctured.

Pectinal teeth 18–19.

Measurements in millimetres.—Total length 63; length of carapace 7·3, tail 36.

Loc. Zacatecas, Mexico (85. 40).

Vajovis crassimanus, sp. n.

♂.—*Colour* a tolerably uniform palish yellow, lightly infuscate in parts; an indistinct fuscous patch on each side of the middle line on the tergite.

Trunk coarsely granular above; smooth below, except for

a few granules and a pair of weakly granular keels. *Tail* long and slender, nearly five times the length of the carapace, which is shorter than its fifth segment; first segment about as wide as long, second distinctly longer than wide, fifth nearly three times as long as wide; keels as in *V. mexicanus*, but the terminal tooth of the superior and supero-laterals not so large, being scarcely noticeably enlarged on the first and fourth segments; fifth with a strong median lateral crest extending over half the segment; the intercarinal spaces coriaceous, but almost entirely devoid of granules; *vesicle* smooth.

Chela with keels and granules as in *mexicanus*; hand very large, keeled, the keels weakly granular, the width almost equal to the length of the hand-back and excelling the width of the first segment of the tail.

Pectinal teeth 15.

♀.—Differs from the male in its shorter thicker tail, the inferior keels of which are less well developed, the medians on the first being obsolete and on the second weak and scarcely granular; hand smaller and quite smooth, practically without crests and without granules, shining and punctured; hand narrower than the fifth caudal segment.

Measurements in millimetres.—Total length (♂) 58; length of carapace 5·8, tail 36 (width of its fifth segment 3, length 8·8); width of hand 4·2, length of movable digit 6·5. Total length (♀) 43; length of carapace 5, tail 24; width of hand 2, of fifth caudal segment 2·5, length of latter 5·5.

Loc. San Diego, Texas (*William Taylor*).

Vajovis granulatus, sp. n.

Colour variegated black and reddish brown; external surface of legs also variegated; sterna and coxæ sparsely spotted.

Trunk granular above, as in *V. mexicanus*. Upperside of *tail* rather coarsely granular, its lateral and inferior surfaces very coarsely granular between the keels; keels developed and granular, as in *V. mexicanus*; *vesicle* granular below. *Tail* short and thick, about four times as long as the carapace, which is as long as its fifth segment; fourth segment almost as wide as long, third much wider than long, fifth about two-thirds as wide as long.

Chela as in *V. mexicanus*, but the hand thicker and the digits shorter, the width of the hand about two thirds the length of the movable digit.

Pectinal teeth 15.

Measurements in millimetres.—Total length 33; length of carapace 4, tail 17.

Loc. Mexico (*Patrick Geddes*).

Belonging to the same category as *V. mexicanus*, C. Koch ('Die Arachniden,' iii. p. 51, 1836), of which the British Museum has several examples from the city of Mexico and the Lake of Chalco, with the inferior caudal keels granular; but differs in having the tail thicker, and the intercarinal spaces coarsely and closely granular. In *V. mexicanus* the intercarinal spaces are at most weakly granular, the inferior being almost wholly smooth, and the fifth segment of the tail is longer than the carapace, the third caudal segment is longer than wide.

Væjovis pusillus, sp. n.

Colour: densely variegated above and below and on the legs and palpi; tergites with a median triangular reddish patch, a V-shaped mark of the same colour, a submarginal yellow stripe, and a clear yellowish-red spot on each side of the middle line; the general pattern of coloration being describable as consisting of a fine yellow band separated by four black bands.

Belonging to the same category as *V. mexicanus* of Koch; with the inferior and infero-lateral caudal crests developed and granular; the lateral and inferior intercarinal spaces very finely and closely granular or coriaceous, also furnished with a few larger granules; vesicle granular below, fifth segment of tail with a very distinct and long median lateral crest.

Palpi constructed very much as in *V. mexicanus*; but the crests, especially on the brachium, much weaker, the posterior crest of the upper and under surfaces very little pronounced.

Pectinal teeth 11–12.

Total length 20–25 millim.

Loc. Omilteme, in Guerrero, 7000 to 9000 feet, under rotten logs (*H. H. Smith*).

The species described in the preceding pages may be determined as follows:—

1. Tail thicker; the inferior and usually the infero-lateral crests of segments 1–4 obsolete, entirely smooth, marked with large punctures; last abdominal sternite smooth, not crested; hand (except in *nigrescens*) smooth, scarcely crested in ♂; brachium with posterior crests weak.
- a. Hand without crests and granules, at least the posterior crests of brachium smooth or almost obsolete; movable digit shorter, the fifth caudal segment variegated black and yellow.

- a*¹. Terga yellow, marked with only one black patch on each side; the rest of the body not variegated. *bilineatus*, sp. n.
*b*¹. Terga yellow or red, but marked with two distinct black patches on each side of the middle line.
*a*². The lateral tergal patch closer to the margin, leaving a broader yellow band; legs entirely pale; tail with only the lower keels lined with black *nigropictus*, sp. n.
*b*². The lateral tergal patch more remote from the margin; legs and lower side of tail strongly blackened *variegatus*, sp. n.
b. Hand with inner surface crested and strongly granular; crests on brachium all strong and granular; movable digit longer than fifth caudal segment, uniformly blackish *nigrescens*, sp. n.
2. Four inferior keels on caudal segments 1-4 visible as smooth upstanding ridges, of which only the infero-lateral keels on the third and fourth are at most indistinctly crenulate.
a. Trunk banded black and yellow; hand in both sexes without crests and entirely smooth; posterior surface and posterior inferior crest of brachium, as well as lower surface of vesicle, punctured, not granular *subcristatus*, sp. n.
b. Trunk not banded; hand distinctly crested, the inner crests granular; posterior surface and posterior inferior crest on brachium, as well as lower side of vesicle, granular *cristimanus*, sp. n.
3. Inferior and infero-lateral caudal keels developed and granular, sometimes the medians on segments 1-2 smooth; hand and brachium usually crested and granular.
a. Inferior and lateral intercarinal spaces of tail coarsely and closely granular; tail short and robust; distinctly variegated *granulatus*, sp. n.
b. Inferior and lateral intercarinal spaces either smooth or at most marked with a few granules.
*a*¹. Of small size (20-25 mm.); pectinal teeth 11-12; distinctly variegated above and on the legs; also the coxæ, pectines, and sterna diversified with blackish spots *pusillus*, sp. n.
*b*¹. Larger size, adults not less than about 45 mm.; pectinal teeth not less than 15; palpi and legs not distinctly variegated; lower surface of trunk without fuscous spots.
*a*². Lateral intercarinal spaces of tail without granules; upper keel of fourth without enlarged terminal denticle; hand in ♀ not crested nor granular *crassimanus*, sp. n.
*b*². Lateral intercarinal spaces of tail granular; upper keel of fourth with terminal denticle much enlarged; hand in ♀ crested and granular *mexicanus*, Koch.